

REMARKS

The examiner's action dated March 16, 2009, has been received and its contents carefully noted.

The objection to, and rejection of, claim 46 on formal grounds is traversed for the reason that claim 46 is clearly a proper dependent claim.

It should firstly be noted that, according to MPEP § 609.01(n) III, the fact that the independent and dependent claims are in different statutory classes does not, in itself render the latter improper. In addition, the Examiner is referred to *Ex parte Moelands*, 3 USPQ2d 1474, where an independent claim was directed to a station, while a dependent claim was directed to a system comprising at least two of the stations of the independent claim, and the Board held that the dependent claim was a proper dependent claim.

Accordingly, it is requested that this objection and rejection be withdrawn.

The rejection of claims 27 and 29-47 as unpatentable over Kil in view of Beyette is respectfully traversed, for reasons to be presented below.

In order to advance prosecution, the independent claims have been amended by adding to them at least the first two of the following features described in the original disclosure:

- direct connection and direct signaling & communication exchange between the access device and the mobile network controller (see direct connection in Figs. 1-4, and disclosure at page 17, lines 8-17 of the present specification),

- routing of a mobile communication session via the access device as via a base station of the mobile network (the entire original description supports that feature);
- assignment/association/registration of mobile numbers to non-mobile devices, performed in the access device; actually, performing more than one such assignments in the access device, for at least some mobile numbers and non-mobile devices (supported by Fig. 1, component 25 and page 18, lines 19-27 of the specification). This feature, together with defining the access device as a DSLAM or OLT, clearly distinguish the claimed access device over any mediation means described in Beyette.

New independent claim 48 defines the access device in a broader manner, based on the main feature of direct connection between the access device=node B=base station and the mobile network controller. The amendment is properly supported by all originally filed Figures 1-4 of the present invention, where that direct connection between the access device having functionality of base station and the mobile network controller is clearly seen (connection 43 in Fig. 1, unlabeled direct connections in Figs. 2-4).

The Kil reference, in Fig. 1 and Para. [0055], indeed describes that an access device (access gateway) is an IP-DSLAM equipment. That access gateway is shown in Fig. 1 and Fig. 9 of Kil as a Wired and Wireless Complex Gateway 120. As can be seen in Fig. 1, Kil's gateway 120 may communicate with a network controller of the mobile network (block BSC, marked 150 and being an equivalent of a radio network controller RNC) via a long loop comprising a public exchange 130, a toll

exchange 135 and a central exchange NSC 140 of the mobile network.

In Fig. 9 of Kil, the complex gateway 120 communicates with a network controller BSC 150 via a block PDSN/FA180, but the block 180 and the very connection shown in Fig. 9 are intended only for data (IP) service communication (see para. [0177], lines 6-7, and [0178]). It is important to emphasize that Kil does not even suggest such a connection for routing mobile communication sessions usually carrying voice. This fact speaks for non-obviousness of our invention as presently claimed.

**In the present invention, the access device** (comprising a Digital Service Line Access Multiplexer, DSLAM, or an Optical Line Termination, OLT) **is directly connected to the mobile network controller** (Radio Network Controller RNC) **and directly communicates with it.** It is known that regular base stations in a mobile network are directly connected to the controller of the mobile network - see for example the Kil reference itself, Figs. 1 and 9, where a base station BTS 160 is directly connected to the mobile network controller BSC150.

Since, **in the present invention, the access device** (in particular, the mentioned DSLAM) **has a capability to perform functions of a base station (node B)** with respect to at least one mobile member of said mobile network, and since it is **directly connected and directly communicates with the network controller of the mobile network**, that access device is **recognized by the controller of the mobile network as another base station.** Moreover, the access device (being connected to a plurality of non-mobile devices) is operative to represent

one non-mobile device of the plurality of the non-mobile devices as having the mentioned mobile number since a suitable assignment/registration is performed in the access device (see for example application claim 31). It is understood that the access device serving the whole access network is able to provide such services to more than one mobile number, and to more than one non-mobile devices of the plurality of such forming the access network (see page 18, lines 19-27 of the present application).

Further, (and due to all the above-mentioned features) the access device is operative to selectively conduct a mobile session either via a mobile device in the mobile network or via a non-mobile device in the non-mobile network.

The complex gateway 120 of Kil cannot be recognized by the BTS160 as another base station, at least since there is no direct connection there-between. Moreover, the processes of providing mixed mobile/non mobile services described in the Kil reference- in order to be handled in KIL's topology - require special processing in each block of the whole long chain formed in the mobile network between the gateway and the network controller. Kil's topology is heavy and inflexible, and it would require changes in the central mobile exchange block and in other blocks of the loop for providing any of the local access networks (LANs) with the mentioned mixed mobile/non-mobile services.

In contrast with that, **the present invention allows providing mobile communication sessions (which first of all carry the voice service) to any specific LAN by means of local equipment; the solution of the present invention is that the**

access device of the LAN is provided with the functionality of a base station and is directly connected to the network controller of the mobile network.

In other words, Kil combines the mobile communication "world" with the fixed communication "world" in a straightforward, heavy and ineffective centralized manner. The present invention describes an access device with the DSLAM+node B function (or OLT+node B function), which is directly connected to the RNC (controller) of a mobile network, and due to that provides much a more economical and effective solution: **in other words, the applicants have invented a local, decentralized way and a local multifunctional access device for combining the two "worlds"**, and this solution is **affordable for an average local access network.**

**Beyette**, in the text portions cited by the Examiner (paragraphs [0024] & [0026] and [0039]), describes a system where the expressions "...represent said non-mobile device of said plurality as having said mobile number" and "a mobile number is associated with a non-mobile device" are understood absolutely differently than they are for the disclosed and claimed in the present application.

Beyett does not describe or illustrate any access device.  
Beyett describes direct interaction between two types of phones. In Fig. 1 of Beyette, there is a hybrid telephone network 10 where at least two devices CP(cell phone) and LP (landline phone) exist and cooperate. The hybrid network 10 is connected to a wired (POTS) telephone network 14. In the hybrid network 10 described and illustrated with reference to Figs 1, 2, 3, communication of a landline phone LP with an outside (remote) cell phone is allowed via (enabled by) a cell

phone CP (Claim 1 of Beyette). In any case, a landline phone LP communicates with a cell phone CP by transmission of information there-between (Claims 1, 27 of Beyette). In another embodiment, selection of a specific cell phone CP in the network 10 for communication with a remote cell phone is made by (via) a landline phone LP (Claim 28 of Beyette). In yet a further embodiment, one of the CPs may select which of the CPs will communicate with the remote cell phone (Claim 29 of B.). An LP phone of Beyette may operate in a POTS mode or in a Cell mode (when it answers to a cell call of a remote cell phone). Such an embodiment is similar to a DECT-like hybrid phone.

When, in para. [0039], Beyette says that a cell number may be associated with a landline telephone number, it means interaction between the cell and landline phones, and/or possible change of mode of these phones, but does not mean (and cannot mean) any functions of an access device, since Beyette does not describe any access device.

The Beyette reference proposes that any call in the hybrid network actually passes via a "mediating" device, being either an LP device or via a CP device, in order to reach an alternative one (CP or LP device respectively).

Actually, each pair of CP and LP devices of Beyette is provided with its separate interface/routing system, which solution is complex and expensive.

In contrast with that proposed by Beyette, **the present invention performs routing to/from mobile phones or to/from non-mobile phones (be they separate or not), via a novel access device serving the whole access network, and that is owing to:**

- the function of the access device to be a base station,  
and

- assignment in the of mobile number(s) to non-mobile  
phone(s), made in the access device for as many of such  
"pairs" as desired. (It is understood that the access device  
serving the whole access network is able and intended to  
provide such assignment to more than one mobile number, and to  
more than one non-mobile device of the plurality of such  
forming the access network - see page 18, lines 19-27 of the  
present application).

Conclusions:

There is not such an access device disclosed in Kil,  
which serves as a base station of a mobile network.

There is not such an access device in Beyette, which  
would enable non-mobile devices of the access network to be  
represented by (associated with, assigned to) respective  
mobile numbers.

The access device according to the present invention,  
being simultaneously a base station of a mobile network and a  
centralized mediator for two or more "pairs" of mobile and  
non-mobile phones, is described neither by Beyette, nor by  
Kil. Even if these two references were to theoretically be  
combined, the result could not arrive at the result defined in  
the present claims.

Thus, the presnt claims define patentably over any  
reasonable combination of the teachings of the applied  
references at least by their recitations of the features  
described at the beginning of these Remarks, so that the

technology according to the present invention is not only novel and non-obvious, but much more effective than that described by both Beyette and Kil.

It might additionally be noted that the Kil reference was cited for the first time in the last office action, which means that this is the first occasion that applicants have had to respond to a rejection based on that reference.

Accordingly, it is requested that the present amendment be entered, the objection and rejections of record reconsidered and withdrawn and the application be allowed.

Respectfully submitted,

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